

5 WHAT IS CLAIMED IS:

1. A turbocharger control system comprising:

a turbocharger comprising:

 a compressor and turbine attached to opposite ends of a common shaft
disposed within a center housing, the center housing comprising a bearing

10 assembly disposed around the shaft, and an oil passage to the bearing
assembly for providing lubricating oil thereto during turbocharger operation,

 an electric motor positioned around the shaft for effecting rotational
movement of the shaft, and

 an oil pressure sensor positioned in fluid communication with the oil
15 passage; and,

 a control system for receiving information from the oil pressure sensor and
providing an output signal to control operation of the electric motor when the oil
pressure is below a predetermined level.

20 2. The system as recited in claim 1 wherein the control system is selected
from at least one of an engine control unit and an electric motor controller configured
to deactivate the electric motor when the oil pressure is below a predetermined level.

 3. The system as recited in claim 1 wherein the oil pressure sensor is
25 attached adjacent an oil inlet to the center housing to be in oil flow communication
with oil entering the center housing.